

WHAT IS CLAIMED IS:

1. A system for the selective attachment of a connector fitted conductor from a remote transceiver to one of a plurality of terminations on a printed circuit card installed within the chassis of the hub equipment of a millimeter wave point-to-multipoint communications system, said system comprising:

a chassis;

a plurality of printed circuit cards operatively installed in said chassis, each of said printed circuit cards having a faceplate and a plurality of terminations each adapted for operative connection to a connector on the distal end of the conductor from a remote transceiver, said faceplate having a plurality of apertures in predetermined locations relative to said terminations;

an insert panel carried by and overlying said faceplate, said panel having at least one adaptor for the selective connection on the external side thereof to the connector on the distal end of a conductor from a remote transceiver, each of said at least one adaptors being in alignment with one of the apertures in said faceplate so that the internal side of said adaptor extends therethrough in proximity to one of the terminations of said printed circuit card; and

means for electrically connecting the internal side of said adaptor to one of said terminations,

the support of said at least one adaptor by said faceplate removing the weight of the connector and conductor from the remote transceiver from the printed circuit card to

which connected.

2. The system of Claim 1 wherein said means for electrically connecting the internal side of each of said adaptors to said card is a jumper cable.

3. The system of Claim 1 wherein said means for electrically connecting the internal side of each of said adaptors to said card is a connector carried by said card.

4. The system of Claim 1 wherein the external side of each of said adaptors extends downwardly to reduce gravity induced stress in the conductor attached thereto

5. The system of Claim 4 wherein the downward angle is approximately forty five degrees below the horizontal

6. A system for the selective attachment of a connector fitted conductor from a remote peripheral component to one of a plurality of terminations on a printed circuit card installed within the chassis of an electrical component without supporting any of the weight of the connector or the conductor by the printed circuit card, said system comprising:

an electrical component having a chassis with at least one printed circuit card operatively installed therein, said printed circuit card having a faceplate and a plurality of terminations each adapted for operative connection to a connector on the distal end of the conductor from a remote peripheral component, said faceplate having a plurality of apertures in predetermined locations relative to said terminations;

an insert panel carried by and overlying said faceplate, said panel having at least one adaptor for the selective connection on the external side thereof to the connector on the distal end of a conductor from a peripheral component, each of said at least one adaptor being in alignment with one of the apertures in said faceplate so that the internal side of said adaptor extends therethrough in proximity to one of said terminations; and

means for electrically connecting the internal side of said adaptor to one of said terminations,

the support of said at least one adaptor said faceplate removing the weight of the connector and conductor from the peripheral component from the one of said terminations to which connected.

7. The system of Claim 6 wherein said means for electrically connecting the internal side of each of said adaptor to said card is a flexible conductor.

8. The system of Claim 6 wherein said means for electrically connecting the internal side of each of said adaptors to said card is a connector carried by said card.

9. The system of Claim 1 wherein the external side of each of said adaptors extends downwardly to reduce gravity induced stress in the conductor attached thereto

10. The system of Claim 9 wherein the angle of the external side of said adaptor is between about forty and about sixty degrees below the horizontal.

11. In a system having a circuit card with a plurality of terminations adapted for selective operative connection to a remote peripheral component, and a faceplate with a plurality of apertures in predetermined locations relative to said terminations, the improvement wherein said operative connection is by way of a through-connector carried by an insert panel overlying and carried by said faceplate, to thereby remove the weight of the conductor of any attached remote peripheral component from the termination to which operatively connected.

12. The system of Claim 11 wherein the external side of said through-connector is downwardly angled to reduce the stress on any attached conductor.

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13. A system for the selective attachment of a connector fitted conductor from a remote transceiver to one of a plurality of terminations on a printed circuit card installed within the chassis of the hub equipment of a millimeter wave point-to-multipoint communications system, said system comprising:

a chassis;

a plurality of printed circuit cards operatively installed in said chassis, each of said printed circuit cards having a faceplate and a plurality of terminations each adapted for operative connection to a connector on the distal end of the conductor from a remote transceiver, said faceplate having a plurality of apertures in predetermined locations relative to said terminations;

an insert panel carried by and overlying said faceplate, said insert panel having at least one aperture in a predetermined location relative to the apertures in said faceplate to thereby selectively control access of to said terminations through the apertures in said faceplate by a remote transceiver.

14. The system of Claim 13 including means for supporting said connector by said insert panel to thereby reduce the weight of said connector on the terminations of said printed circuit card.

15. The system of Claim 14 wherein the external side of said connector extends downwardly to reduce gravity induced stress in the conductor attached thereto

16. The system of Claim 4 wherein the downward angle is approximately forty five degrees below the horizontal

17. In a system having a circuit card with a plurality of terminations adapted for selective attachment to a remote peripheral component, and a faceplate with a plurality of apertures in predetermined locations relative to said terminations, the improvement comprising an insert panel overlying said faceplate, said insert panel having at least one aperture in a predetermined location relative to the apertures in said faceplate to thereby selectively control access of a remote peripheral to said terminations.

18. In a system having a chassis for supporting a plurality of printed circuit cards, each of said cards having an apertured faceplate and a plurality of terminations for the selective operative attachment of a peripheral component, said system having plural peripheral components selectively operatively connected to one of said terminations, a method of supporting the connection between the peripheral components and the card comprising:

(a) overlaying an apertured insert panel on the faceplate so that access to one of the terminations is available through aligned apertures in the faceplate and the insert panel;

(b) attaching the insert panel to the chassis; and

(c) supporting the connector of the peripheral equipment to the insert panel while electrically connecting the connector to one of the terminations so that the weight of the connector is carried by the chassis rather than the card.

19. In a system having a chassis for supporting a plurality of printed circuit cards, each of said cards having an apertured faceplate and a plurality of terminations for the selective operative attachment of a peripheral component, said system having plural peripheral components selectively operatively connected to one of said terminations, a method of supporting the connection between the peripheral components and the card comprising:

- (a) providing an insert panel with at least one through-panel adaptor;
- (b) positioning the insert panel on the faceplate so that an adaptor extends through one of the apertures in the faceplate into proximity to one of the terminations;
- (c) establishing an electrical connection between the adaptor and the one of the terminations; and
- (d) attaching the insert panel to the chassis to thereby support the connector of the peripheral equipment from the chassis rather than the termination to which electrically connected.

20. In a system having a chassis for supporting a plurality of printed circuit cards, each of said cards having an apertured faceplate and a plurality of terminations for the selective operative attachment of a peripheral component, said system having plural peripheral components selectively operatively connected to one of said terminations, a method of controlling the access of peripheral components to the cards comprising:

(a) providing an insert panel having electrical access port therethrough at a plurality of locations less than the number of apertures in the faceplate;

(b) positioning the insert panel in an overlying relationship to the faceplate with the ports of the insert panel aligned with selective apertures in the faceplate so that access to the terminations of the card is controlled.

21. The method of Claim 20 wherein the ports are apertures.

22. The method of Claim 20 wherein the ports are adaptors.

23. An insert panel for the apertured faceplate of a printed circuit card comprising:

a generally planar elongated panel adapted to be carried in an overlying relationship to the apertured faceplate of a printed circuit card;

a plurality of ports carried by said panel at predetermined locations along the length thereof corresponding to the location of selected apertures in the faceplate

24. The panel of Claim 23 wherein said ports are apertures.



25. The panel of Claim 23 wherein said ports are adaptors having an internal connection extending through an aperture in the faceplate when said panel is carried thereby.

26. The panel of Claim 25 wherein the external portion said adaptors are downwardly angled to reduce the stress on any conductor connected thereto.

27. The panel of Claim 26 wherein the angle is between about 40° and 60° below the horizontal.

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